EXHIBIT 5

```
1
               IN THE UNITED STATES DISTRICT COURT
 2
             FOR THE NORTHERN DISTRICT OF GEORGIA
 3
                         ATLANTA DIVISION
 4
 5
     DONNA CURLING, ET AL.,
                                        )
 6
          Plaintiffs,
                                       )CIVIL ACTION FILE
 7
                                        )NO. 1:17-CV-2989-AT
     vs.
8
     BRAD RAFFENSPERGER, ET AL.,
          Defendants.
 9
                                        )
10
11
12
                     VIDEOTAPED DEPOSITION OF
13
                 MICHAEL IAN SHAMOS, PH.D., J.D.
                          July 19, 2019
14
15
                            9:16 a.m.
16
17
18
             Ross Alloy Belinfante Littlefield, LLC
19
                       500 14th Street N.W.
20
                         Atlanta, Georgia
21
22
23
24
     Robin K. Ferrill, CCR-B-1936, RPR
25
     PAGES 1 - 217
                                                     Page 1
```



```
1
 2
 3
 4
 5
 6
 7
 8
 9
10
11
12
13
               But you agree -- you said you are not a fan
          Q.
14
     of the bar codes. You agree that if a BMD is going
15
     to be used, the more reliable approach is one that is
16
     readable by the human voter, and that what's going to
     get tallied is what they can actually read
17
18
     themselves; is that fair?
19
               MR. RUSSO: Objection. This is outside the
20
```

scope of his declaration.

Yes, I agree. Α.

21

22

23

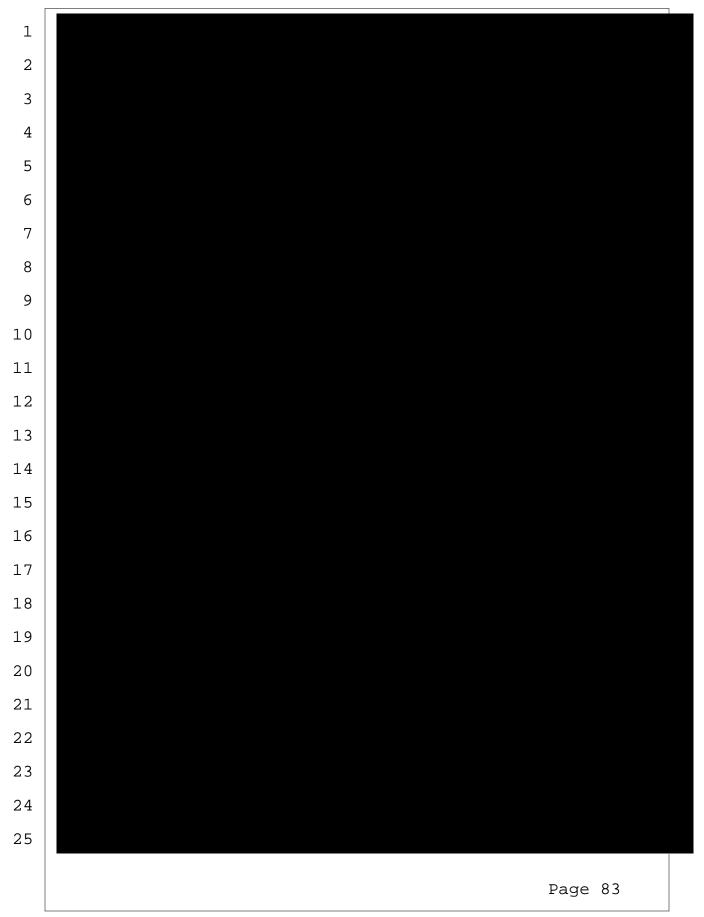
24

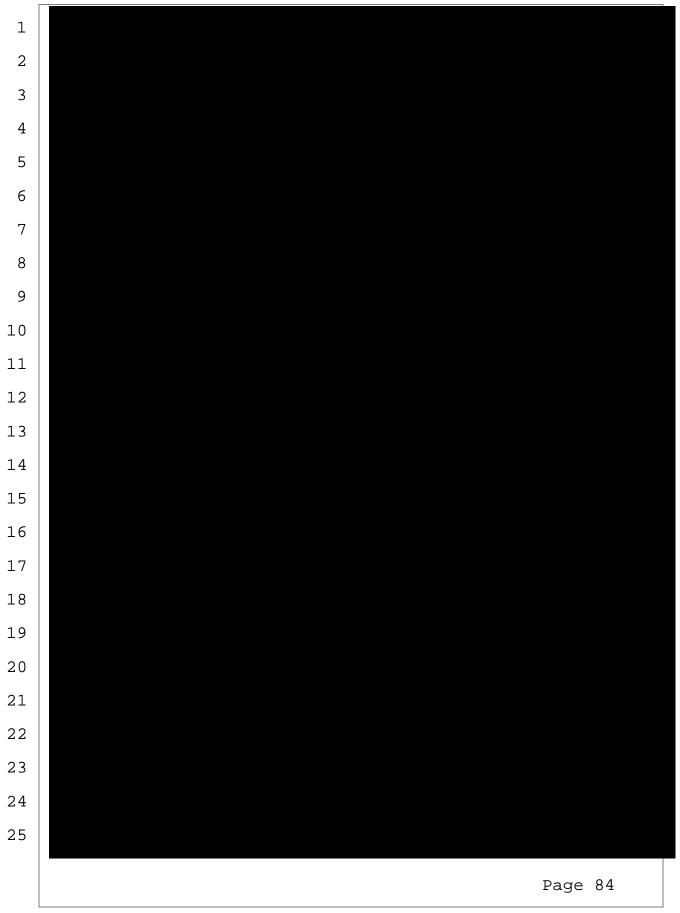
25

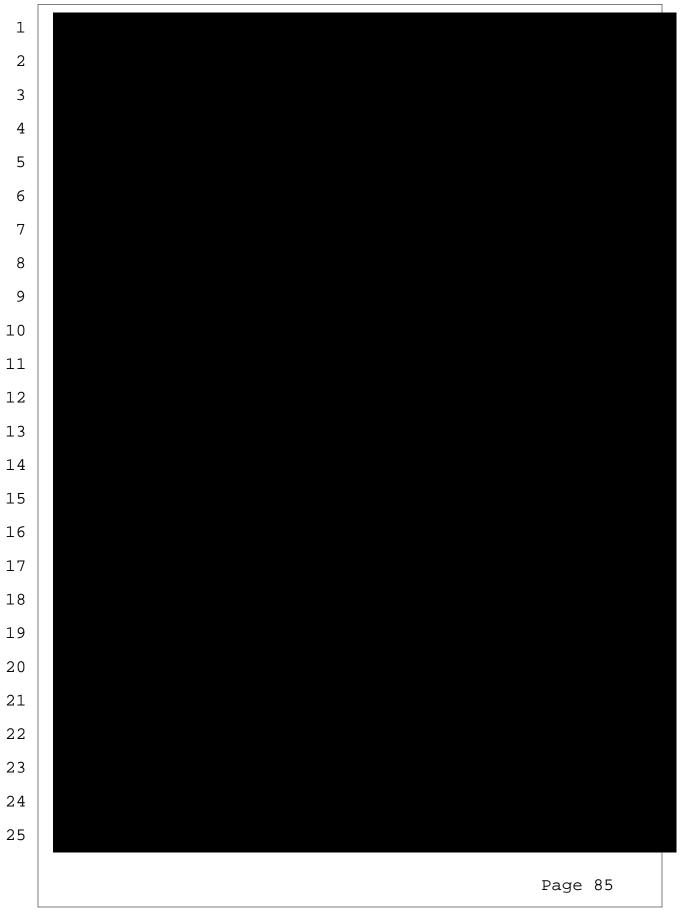
(By Mr. Cross) Thank you. Ο.

On paragraph 52, again, the last sentence reads, "A BMD never makes a mark that would not constitute a vote." Do you see that?

1	Q. All right. Take a look at paragraph 106.
2	A. Yes.
3	Q. You wrote here, "If the Russians want to
4	skew Georgia's elections" do you see where I am at
5	the end?
6	A. Yes.
7	Q "it would be much easier for them to do
8	so by bringing" or sorry, "by bribing insiders to
9	tamper with paper ballots, particularly absentee
LO	ballots, than to mount sophisticated cyberattacks for
L1	which there is no realistic penetration factor." Do
L2	you see that?
L3	A. Yes.
L4	Q. But as we talked about before, Russians
L5	could also just bribe insiders to tamper with DREs,
L6	such as swapping out memory cards, right?
L7	A. They could.
L8	Q. That would be a realistic penetration
L9	factor with the current system, right?
20	A. Yes.
21	
22	
23	
24	
25	





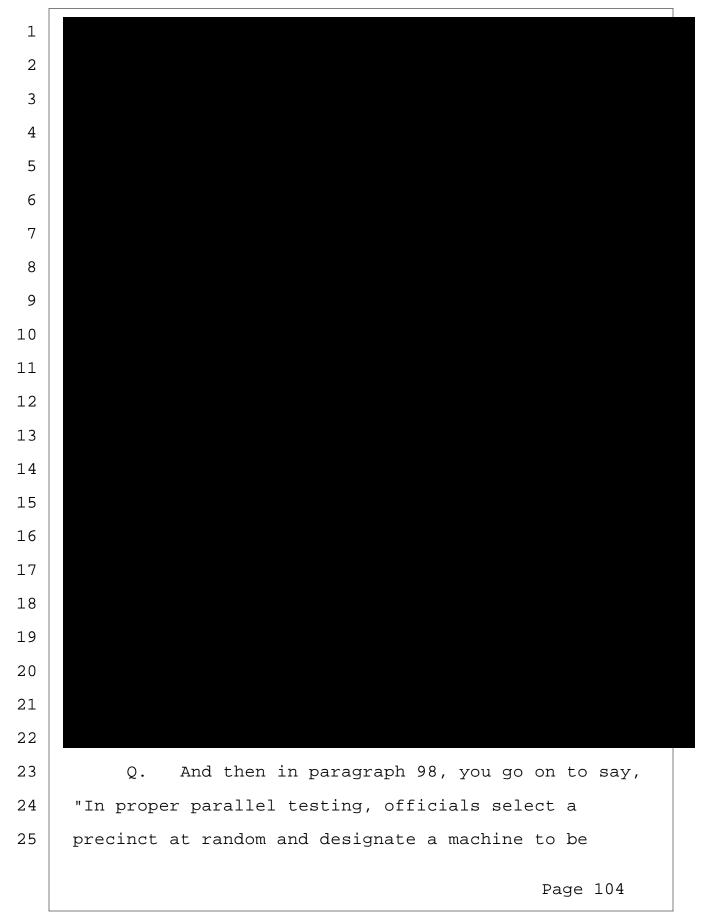


		\neg
1		
2		
3		
4		
5		
6		
7		
8		
9	Q. You also understand that by infecting only	

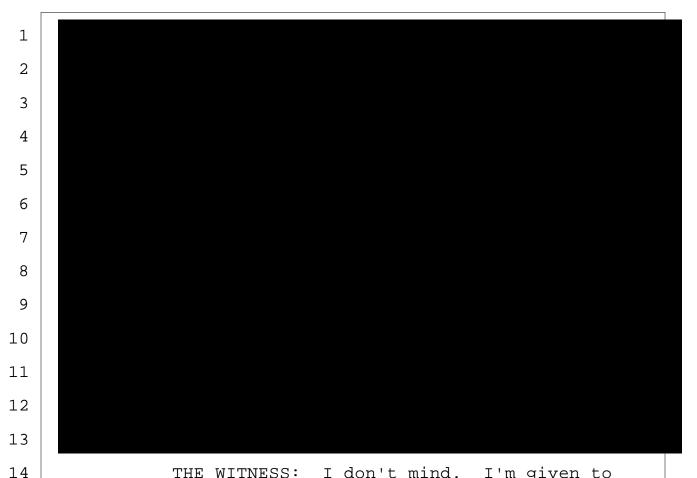
Q. You also understand that by infecting only a relatively small number of DREs, that could affect the outcome of an election, right?

A. It can affect close elections, yes. Of course, you never know in advance which ones are really going to be close.

Q. So you have got a state-wide election in which about 4 million voters have voted, and the leading candidate is ahead by, say, almost 20,000 votes.



1 voted on, but its votes will not be counted in the 2. election." Do you see that? 3 Yes, I think this -- I think this was misunderstood because I didn't phrase it correctly. 4 5 It's not one precinct in the whole state; you could certainly do this in every county. 6 So this should be done in every county? Ο. 8 Α. Yes. And in big counties, you would pick more than one precinct. 9 So a big county like Fulton, for example, 10 11 how many precincts would you suggest? That's a statistical matter 12 Α. I don't know. 13 to figure out what the right number would be. But you would expect someone with 14 O. 15 statistical expertise to figure out an appropriate 16 statistical number of machines for the parallel 17 testing? 18 Α. Yes. 19 Do you understand that Georgia currently 20 does parallel testing on a single DRE out of all 21 27,000 --22 23 24 25



THE WITNESS: I don't mind. I'm given to understand that the process you outlined is what -- is the process followed in Georgia. I castigate Georgia for not following my recommendations on how parallel testing should be done.

Q. (By Mr. Cross) And you would agree that nothing can be reliably concluded about the reliability of DREs across the state, the 27,000 DREs in the state-wide election, or even across county or municipal elections, based on parallel testing of a single DRE. We agree on that, right?

1

2

3

4

5

6

7

8

9

10

- A. The only thing a parallel testing on a single DRE will reveal is whether all of the voting machines in the state have been infected, because then the machine being tested would also have been infected.
- Q. Right. The only way you could have any confidence that the machine you have indicates anything about the reliability of the 27,000, is if all 27,000 are affected?
- A. Yes, I don't have confidence in a procedure which selects one machine out of 27,000.

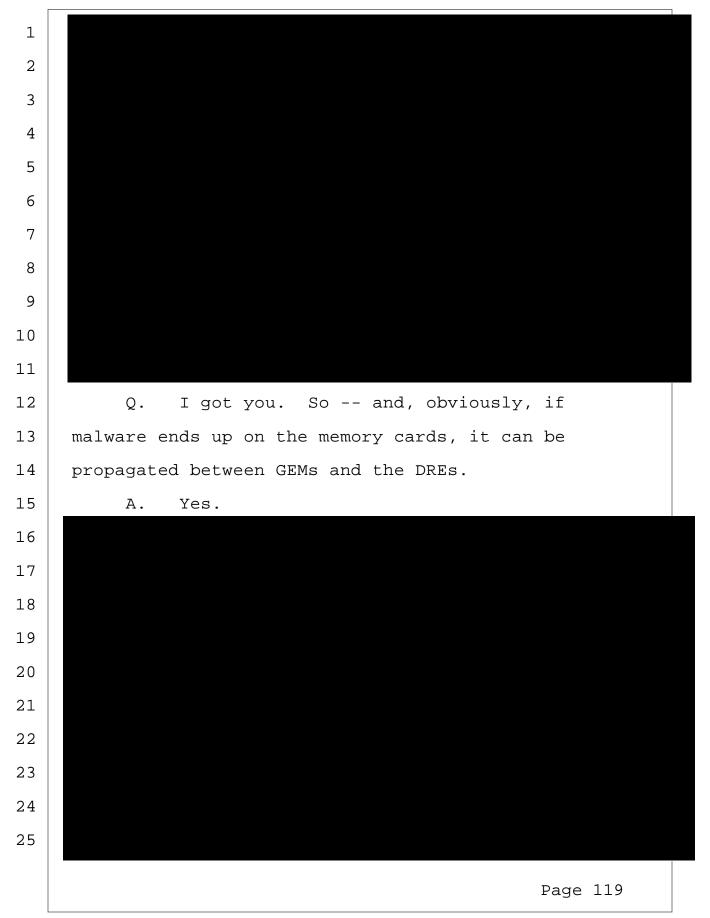
11	which	selects	one	machine	out	of	27,000.	
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

1 2 3 4 5 6 7 time ago." You indicate, "I was an examiner from 8 Pennsylvania in 2006 when the exploit was discovered. When I learned of it, I persuaded the Pennsylvania 9 10 Secretary of the Commonwealth to threaten Diebold 11 with decertification unless the vulnerability was 12 remediated before the next election. Diebold did so 13 and demonstrated the repair to the satisfaction of 14 the secretary." Do you see that? 15 Α. Yes. 16 O. And you previously characterized this 17 particular vulnerability as, quote, one of the most 18 severe security flaws ever discovered in a voting 19 system. Do you remember that? 20 Α. Up to 2006, yes. 21 22 23 24 25 Page 115

```
1
 2
 3
 4
 5
 6
 7
                So today you have a view that there are
 8
     more serious flaws that have been discovered with
 9
     DREs?
                I think so.
10
           A.
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
                                                     Page 116
```

1		
2		
3		
4		
5		
6	Q. But there's no evidence, that we have seen,	
7	that Georgia implemented the patch with remediation	
8	that you describe in paragraph 74 or, sorry,	
9	paragraph 75 for the for what you characterize as	
10	the most severe security flaw ever as of 2006, right?	
11	A. As I say, I don't know.	
12	Q. You didn't ask anyone that for your	
13	opinions, right?	
14	A. No.	
15	Q. And do I understand correctly, that if the	
16	current software running in Georgia dates back to	
17	2004/2005, and they didn't implement any patches	
18	after that time, we can infer that the remediation	
19	did not occur in Georgia, right?	
20	A. Yes, we can infer that. And it should be	
21	done before the machines are used again.	
22		
23		
24		
25		





1	CERTIFICATE
2	STATE OF GEORGIA)
3) ss.:
4	FULTON COUNTY)
5	
6	I, Robin Ferrill, Certified Court Reporter
7	within the State of Georgia, do hereby certify:
8	That MICHAEL IAN SHAMOS, Ph.D., J.D., the
9	witness whose deposition is hereinbefore set forth,
10	was duly sworn by me and that such deposition is a
11	true record of the testimony given by such witness.
12	I further certify that I am not related to
13	any of the parties to this action by blood or
14	marriage; and that I am in no way interested in the
15	outcome of this matter.
16	IN WITNESS WHEREOF, I have hereunto set
17	my hand this 20th day of July, 2019.
18	
19	Dail Ferrill
20	CASIA SON VOC
21	ROBIN K. FERRILL, RPR
22	
23	
24	
25	
	Page 216